

IN THE CLAIMS

1 (Currently Amended). A process for preparing a ~~low-density~~ flexible polyurethane material in a mould- foam comprising:

reacting a polyisocyanate, a polyether polyol, and water in a mould in which process the following steps are conducted:

- a) applying an ~~a conventional~~ external mould release agent onto at least those surfaces of the mould which will be in contact with ingredients used for preparing the polyurethane material and/or the finished polyurethane material;
- b) feeding the ingredients for preparing the polyurethane material into the mould;
- c) allowing the ingredients to react and to form the polyurethane material;
- d) removing the formed polyurethane material from the mould; and
- e) repeating steps b, c, and d at least 10 times without repeating step a,

wherein at least 25% by weight of the ingredients used to make the polyurethane material, excluding ~~any~~ water in this calculation, ~~comprise~~ consist of polyether polyol having an average nominal functionality of 2-6, an average equivalent weight of 500-5000, and an oxyethylene content of at least 50% by weight, and wherein the apparent overall density of the polyurethane material removed from the mould is 55-150 kg/m³.

2 (Previously Presented). The process according to claim 1 wherein steps b, c, and d are repeated at least 25 times without repeating step a.

3 (Previously Presented). The process according to claim 1 wherein steps b, c, and d are repeated at least 50 times without repeating step a.

Claims 4 and 5 (Cancelled)

6 (Currently Amended). The process according to claim ~~[[4]]~~ 1 wherein the amount of water is 0.8-5% by weight calculated on all ingredients used.

7 (Currently Amended). The process according to claim [[4]] 1, wherein the amount of polyether polyol having at least 50% by weight of oxyethylene groups is at least 50% by weight calculated on all ingredients used.

8 (Currently Amended). The process according to claim [[4]] 1 wherein the reaction is conducted at an NCO index of 40-150.

9 (Previously Presented). The process according to claim 8 wherein the reaction is conducted at an NCO index of 70-110.

10 (Previously Presented). The process according to claim 1 wherein step a is repeated after one week.

11 (Previously Presented). The process according to claim 1 wherein step a is repeated after 24 hours.

12 (Previously Presented). The process according to claim 1 wherein step a is repeated after 8 hours.

Claims 13-16 (Cancelled)

17 (Currently Amended). The process of claim 1 wherein said ~~mold~~ mould is a closed ~~mold~~ mould.

Claim 18 (Cancelled).

19 (Currently Amended). The process of claim 1 wherein said ~~mold~~ mould is an open ~~mold~~ mould.

Claim 20 (Cancelled).

21 (Previously Presented). The process according to claim 1 wherein said polyol has a number average nominal functionality of 2-4, a number average equivalent weight of 750-2500 and an oxyethylene content of 60-90% by weight, and is reacted with:

- a) a stoichiometric excess, relative to polyol, of a polyisocyanate containing at least 65% by weight of 4,4'-diphenylmethane diisocyanate or derivative thereof; and
- b) water; to form an isocyanate-terminated, urethane-containing prepolymer having an NCO value of 3-15% by weight.

Claims 22 and 23 (Cancelled).

24 (Previously Presented). The process according to claim 1 wherein applying a conventional external mould release agent includes applying a wax onto at least those surfaces of the mould which will be in contact with ingredients used for preparing the polyurethane material and/or the finished polyurethane material.

25 (Currently Amended). The process according to claim 1 wherein applying a ~~conventional~~ an external mould release agent includes applying an external mould release agent that does not require curing onto at least those surfaces of the mould which will be in contact with ingredients used for preparing the polyurethane material and/or the finished polyurethane material.

26 (Previously Presented). The process according to claim 1 wherein feeding the ingredients into the mould includes feeding the polyether polyol and a polyisocyanate into the mould according to a one-shot method.

27 (Currently Amended). The process according to claim 1 including preparing a prepolymer that is the reaction product of ~~an excessive amount of a~~ said polyisocyanate and said polyether polyol to form a prepolymer having an NCO value of 3 to 15 % by weight, mixing said prepolymer with additional amount of said polyether polyol, and feeding the mixture of said prepolymer and said additional amount of said polyether polyol into said mould.